

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 09/848,701 05/02/2001 Joseph Zelina H0001340 7935 01/03/2005 **EXAMINER** 7590 Honeywell International, Inc. KOCZO JR, MICHAEL Law Dept. AB2 ART UNIT PAPER NUMBER P.O. Box 2245 Morristown, NJ 07962-9806 3746

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/848,701	ZELINA, JOSEPH
	Examiner	Art Unit
	Michael Koczo, Jr.	3746
The MAILING DATE of this communication app Period for Reply	ears on the cover shet with the c	orrespond nce address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 28 Oc	<u>ctober 2004</u> .	
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>15,17,19,20,22-25,27 and 29-33</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>15,17,19,20,22-25,27 and 29-33</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or	election requirement.	
Application Papers	•	
9)☐ The specification is objected to by the Examine	r.	
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.		
Applicant may not request that any objection to the o	- · ·	` ` `
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119		
12)☐ Acknowledgment is made of a claim for foreign a)☐ All b)☐ Some * c)☐ None of:		-(d) or (f).
1. Certified copies of the priority documents have been received.		
<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>		
3. Copies of the certified copies of the prior application from the International Bureau		ed in this National Stage
* See the attached detailed Office action for a list of		d
200 the diagnost detailed office detain for a list (	s. and defining depict flot redelive	<b>~</b> .
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summary	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite atent Application (PTO-152)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	(1 10 10±)

Art Unit: 3746

#### **DETAILED ACTION**

Applicant's arguments filed on October 28, 2004 have been fully considered but they are not persuasive.

### Claim Objections

Claims 22, 23, 31 and 32 are objected to because of the following informalities:

The recitation "further comprising a...combustor" would appear to be a double inclusion of the combustor as recited in claims 15 and 25. This can be corrected by changing "further comprising" to --wherein the combustor is--. Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

Claims 15, 17, 19, 20, 22 to 25, 27 and 29 to 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 15 and 25 recite "a main circuit fuel nozzle disposed about an outer periphery of said fuel injector body and concentrically disposed about a plurality of axially oriented air swirlers" (emphasis added). "Concentric" is defined as having a common center or axis. A "plurality of axially oriented air swirlers" does not define an axis or center. If applicant is referring to axis 10A as shown in figure 1, it is seen that the axis of the main circuit fuel nozzle 32 is actually perpendicular to axis 10A, and not concentric therewith.

Art Unit: 3746

The recitation "said air swirlers located within said fuel injector body and concentrically disposed about a pilot circuit fuel nozzle" is also not understood for the same reason. As shown in figure 1, the air swirlers are radially, not concentrically, spaced from the pilot circuit fuel nozzle.

The expression "combustion centerline" is not understood. Did applicant intend to recite --combustor centerline--?

It is also not understood how a centerline can be "formed" within a fuel injector body.

Thorough revision of the claims is required in order to render them definite in form according to the statute.

## Claim Rejections - 35 USC § 102

Claims 15, 17, 19, 20, 23, 24, 25, 27, 29, 30, 32 and 33, as understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Pritchard et al. Pritchard et al. disclose and gas turbine combustor and fuel injector having an annular dome 38, a radial flow air swirler 102 mounted to dome 38 and to an external surface of fuel injector body 96, a plurality of axial air swirlers 74, 76, a pilot nozzle 68, radial main nozzles 98, and wherein the dome includes a plurality of circumferentially disposed dome cooling nozzles. The fuel injector body 96 "incorporates" both the pilot circuit and the main circuit fuel nozzles.

Applicant argues that "The fuel manifold of Pritchard et al. delivers fuel to the fuel injection ports, however; the fuel manifold is not part of the pilot mixer structure as shown in Figure 4 of Pritchard et al." However, this limitation is not being claimed.

Art Unit: 3746

#### Claim Rejections - 35 USC § 103

Claims 22 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Pritchard et al. in view of Sjunnesson et al. Sjunnesson et al. disclose that gas turbine combustor

can be either of the "can" type or "annular" type (see col. 2, l. 28). In view of Sjunnesson et al.

recognizing the art equivalency of "can" type or "annular" type combustors, it would have been

obvious to substitute a "can" type combustor for the "annular" type combustor of Pritchard et al.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry relating to patent applications in general should be directed to the Patent Assistance Center at 1-800-786-9199.

Art Unit: 3746

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Koczo, Jr. whose telephone number is 571-272-4830. The examiner can normally be reached on M-Th; 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached at 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael Koczo, Jr. Primary Examiner

Art Unit 3746